



**United States Department of Agriculture  
Natural Resources Conservation Service**

## **Energy Enhancement Activity – Energy Use Reduction for Field Operations**

### **Energy Use Reduction for Field Operations**

The cost of petroleum energy is increasing dramatically. Not since the early 1970's have we seen such sharp price increases in petroleum. With supplies dwindling and demands increasing, prices should continue to rise.

Fuel expenses are a significant portion of many farms' budgets. With operating margins tight especially for small farms fuel efficiency may play a key role in their survival. To ensure profitability farming and ranching operators should seek out any and all opportunities to conserve energy and reduce costs.

### **Benefits**

In addition to saving money the advantages of energy conservation include reducing air pollutants, stemming global greenhouse gas emissions, and decreasing our reliance on foreign oil.

### **Criteria for Energy Use Reduction for Stationary Sources Enhancement Activity**

- Acceptance of this enhancement requires that the client demonstrate future fuel savings over their baseline use by changes to their field operations.
- The baseline is established using NRCS's tool, RUSLE2 at the time of sign-up.
- Reduced trips across the field, and reduced tillage intensity are documented by comparing the new system to the baseline.
- Payment will be based on millions of British Thermal Units (Btus) conserved.

### **Reference:**

Parsons, Samuel D., 2003. Estimating Fuel Requirements for Field Operations, AE-101, Purdue University, Cooperative Extension Service  
<http://www.ces.purdue.edu/extmedia/AE/AE-110.html>

Griffith, Donald R., Samuel D. Parsons, (no date) Energy Requirements for Various Tillage Planting Systems, NCR-202-W, Purdue University, Cooperative Extension Service  
<http://www.ces.purdue.edu/extmedia/NCR/NCR-202-W.html>